



Alcimedea

A case report in the *J Emerg Med* (2009;37:75–76) describes “crack eye syndrome”, a condition Alcimedea had not come across before. It seems that the syndrome, which was first described in 1989, refers to corneal injury associated with crack cocaine use. Smoking crack cocaine predisposes to corneal injury for a number of reasons. Firstly, crack cocaine smoke has a direct toxic effect on the corneal epithelium, an effect that is exaggerated by the anaesthetic properties of cocaine that lead to a decreased corneal blink reflex. Secondly, cocaine-induced damage to the corneal nerves decreases corneal epithelial integrity, leading to neurotrophic keratopathy. Thirdly, chronic chemical burns may be caused by repeated exposure to the alkaloid smoke and, finally, in some patients, the smoke acts as a direct irritant, causing excessive eye rubbing that results in infectious complications. The authors suggest that this syndrome is likely to be encountered frequently and make the point that an adequate history—including a drug history—is imperative for proper diagnosis.

Knowledge of the trends in use of illicit drugs is vital to a coordinated public health response to drug misuse. A novel method of monitoring the variation in use of cocaine and heroin in Florence over a one year period was reported in *Forensic Science International* (2009;189:88–92). Researchers analysed waste water in the city for cocaine, benzoylecgonine and morphine using state-of-the-art measuring techniques. The results showed a bimodal distribution for cocaine misuse with peaks in December and March, while heroin showed a main peak in April. The heroin-to-cocaine use ratio in terms of estimated doses per month ranged from 0.11 to 0.76, representing new evidence that the use of cocaine is more prevalent than heroin in Florence. The authors conclude that waste water analysis can become a valuable tool in monitoring use of illicit drugs over time. In particular, it can highlight changes in the magnitude and relative use of illicit drugs at a population level and provide useful information to help develop strategies against drug trafficking and abuse.

A 2-month old male infant presented to a hospital in Italy with a painful distended abdomen, difficulty in defaecation and a palpable lower abdominal mass. Ano-rectal examination was unremarkable apart from some peri-anal erythema and X-rays showed a mass in the distal colon. The child was initially thought to have partial bowel obstruction secondary to an impacted faecal mass. Subsequent investigations revealed a carrot divided into two pieces, measuring 3cm and 7cm in length, in the sigmoid colon.

The only explanation for this was child abuse and the authors of the report conclude that the case is instructive not only for the atypical signs and symptoms related to the abuse (i.e. symptoms of partial bowel obstruction in the absence of any perineal injuries), but also for underlining the importance of correctly interpreting radiological evidence (*For Sci Int* 2009;192:e7–e9).

There is evidence that physical abuse of older women, including sexual abuse, has risen rapidly over the last decade. Therefore, a study comparing a group of postmenopausal victims of sexual assault with younger adult women (18–39 years old) by examining patient demographics, assault characteristics, and patterns of physical injury makes interesting reading (*Am J Emerg Med* 2009;27:922–928). Of 1917 adult sexual assault victims examined over a 5-year period, there were 72 (4%) who were post-menopausal and at least 50 years old. The postmenopausal victims were more likely to have been assaulted by a single assailant, typically a stranger (56% vs 32%), in their own home (74% vs 46%) and experienced more physical coercion (72% vs 36%). They had a greater mean number of non-genital as well as ano-genital injuries than the younger control group and, although the localized pattern and type of physical injuries were similar in both groups, postmenopausal women tended to have more ano-genital lacerations and abrasions.

In the US, victims of sexual assault frequently report to Emergency Departments (EDs). A prospective study that analysed demographic and event characteristics of patients presenting to a large urban, teaching hospital ED for evaluation after sexual assault identified a total of 1172 patients over a 5-year period (*J Emerg Med* 2009;37:328–334). Of the study group, 92.6% were women, with a mean age of 27 years. The sample was 59.1% black, 38.6% white, and 2.3% “Other.” Black victims of sexual assault were significantly more likely to be young (25 years or less) than whites. Over half (54%) reported involvement of drugs or alcohol during the event. Fifty-three percent knew their assailant(s), and black and young patients were significantly more likely to know the perpetrator(s). Threats of force were common (72.4% of sample), and multiple assailants were uncommon (18.1% of sample). Physical evidence of trauma was present in more than half (51.7%), with increased rates among whites and older persons. Multivariate analysis showed that race, age, threats, and substance use during the event were independent risk factors for finding evidence of trauma on physical examination.